PROJECT TITLE : The Website Traffic Analysis

Project Definition: The project involves analyzing website traffic data to gain insights into user behavior, popular pages, and traffic sources. The goal is to help website owners enhance the user experience by understanding how visitors interact with the site. This project encompasses defining the analysis objectives, collecting website traffic data, using IBM Cognos for data visualization, and integrating Python code for advanced analysis.
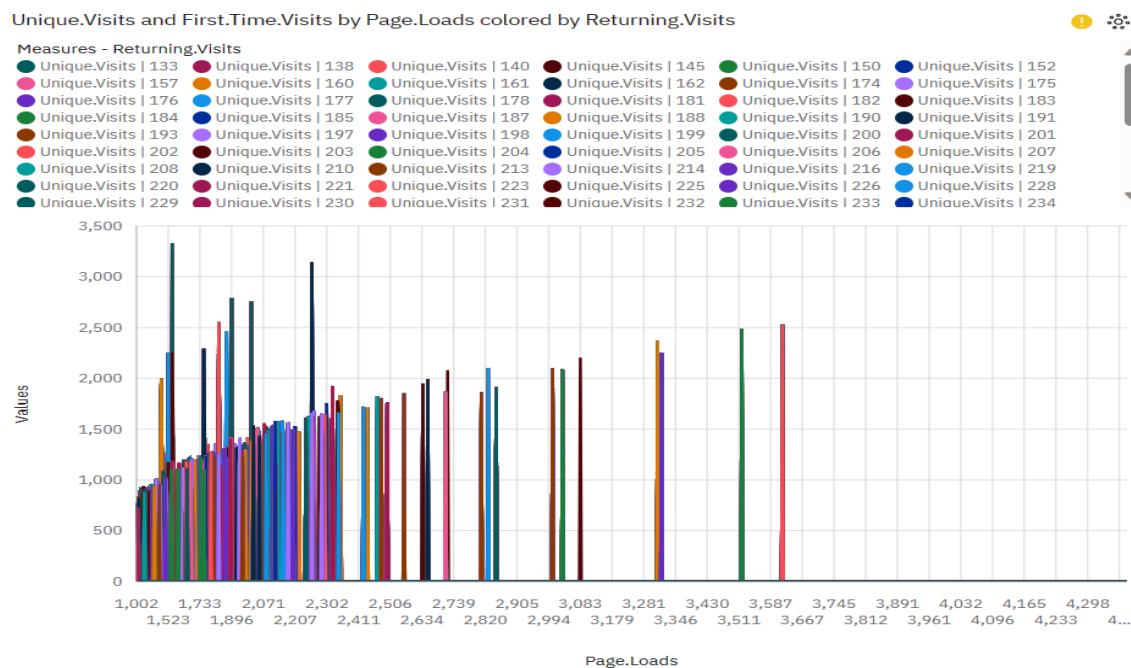
Project Objective:

Start by discussing the project objectives with the website owners or stakeholders. Understand their specific goals and expectations from the analysis. Clearly define what insights you want to extract from the website traffic data.
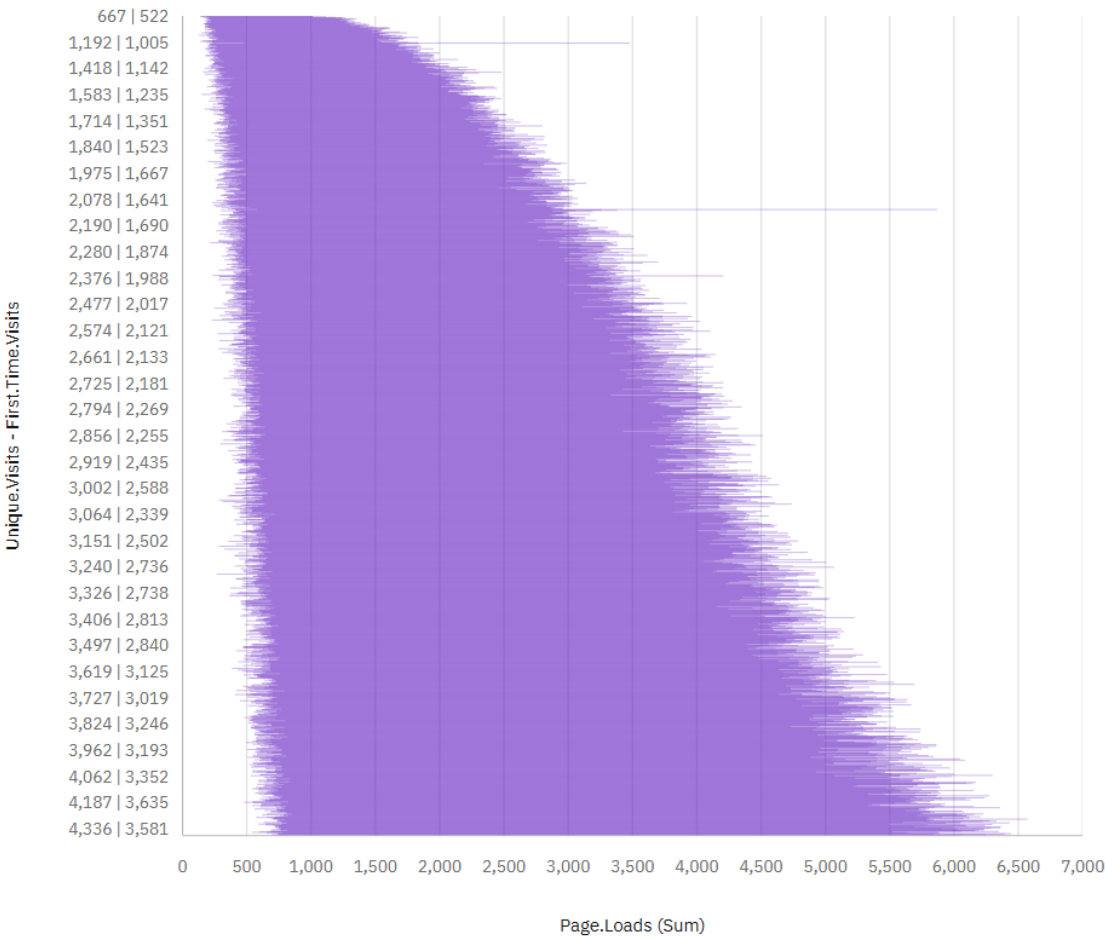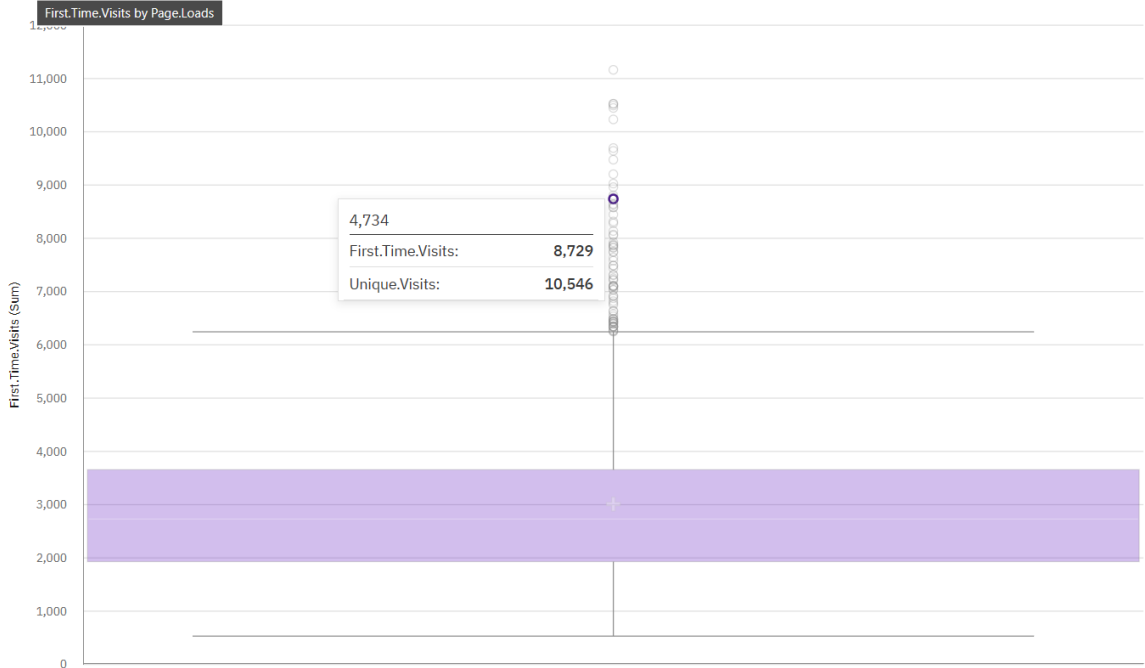
Data Source:

https://www.kaggle.com/datasets/bobnau/daily-website-visitors

VISUALATION IS USING IBM COGNOS ANALYTICS :

Page.Loads by Unique.Visits and First.Time.Visits

Unique.Visits - First.Time.Visits (y-axis labels, top to bottom):
667 | 522
1,192 | 1,005
1,418 | 1,142
1,583 | 1,235
1,714 | 1,351
1,840 | 1,523
1,975 | 1,667
2,078 | 1,641
2,190 | 1,690
2,280 | 1,874
2,376 | 1,988
2,477 | 2,017
2,574 | 2,121
2,661 | 2,133
2,725 | 2,181
2,794 | 2,269
2,856 | 2,255
2,919 | 2,435
3,002 | 2,588
3,064 | 2,339
3,151 | 2,502
3,240 | 2,736
3,326 | 2,738
3,406 | 2,813
3,497 | 2,840
3,619 | 3,125
3,727 | 3,019
3,824 | 3,246
3,962 | 3,193
4,062 | 3,352
4,187 | 3,635
4,336 | 3,581

x-axis: Page.Loads (Sum) — 0, 500, 1,000, 1,500, 2,000, 2,500, 3,000, 3,500, 4,000, 4,500, 5,000, 5,500, 6,000, 6,500, 7,000

First.Time.Visits by Page.Loads

First.Time.Visits by Page.Loads

4,734
First.Time.Visits: 8,729
Unique.Visits: 10,546

y-axis: First.Time.Visits (Sum) — 0, 1,000, 2,000, 3,000, 4,000, 5,000, 6,000, 7,000, 8,000, 9,000, 10,000, 11,000, 12,000

Unique.Visits hierarchy colored by First.Time.Visits and sized by Page.Loads

Page.Loads (Sum)
4,734   4,734

First.Time.Visits (S...
2,763   3,133
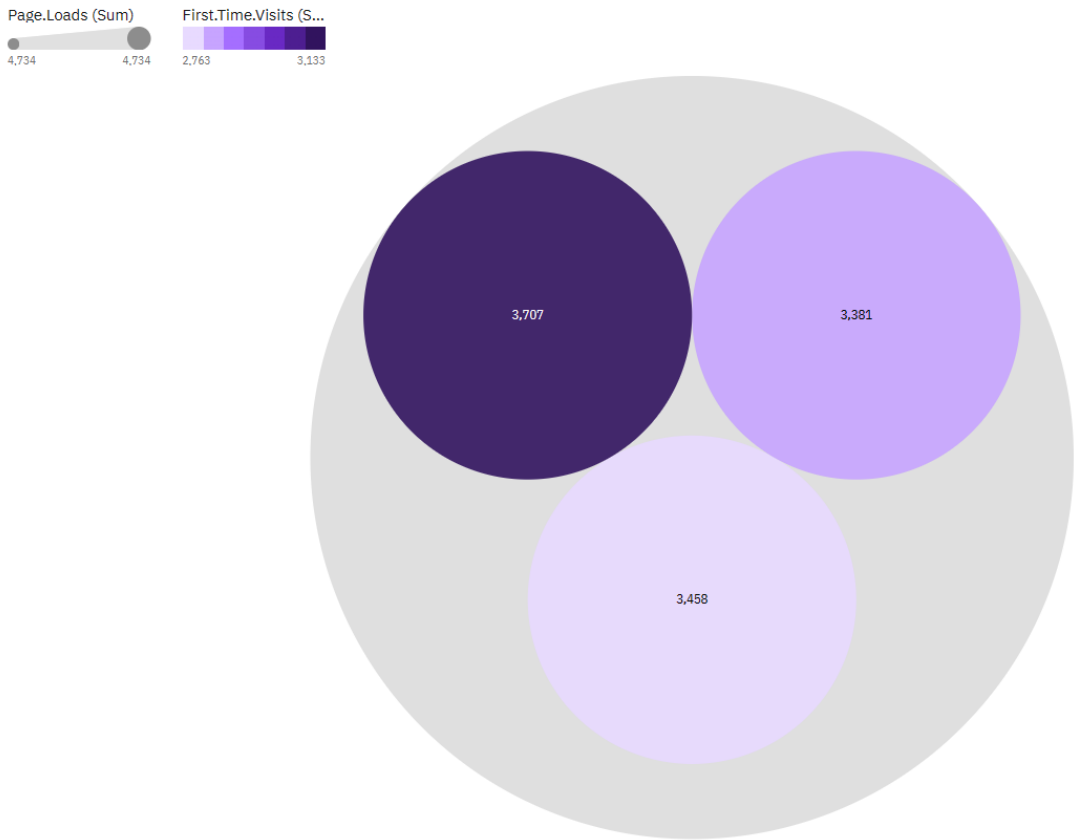
First.Time.Visits, Unique.Visits, Page.Loads

2,312 2,310 3,581 2,158 2,971 2,476 2,279 3,204 3,309 1,656 1,507 3,249 1,889 1,706 3,460 3,563 2,006 3,575 3,869 2,957 2,424 2,122 1,710 1,293 4,031
2,196 786 4,070 792 2,016 1,803 1,417 1,231 3,009 2,906 2,568 4,037 2,668 4,110 3,892 1,332 1,539 1,414 2,657 924 2,785 2,808 2,011 3,550 4...
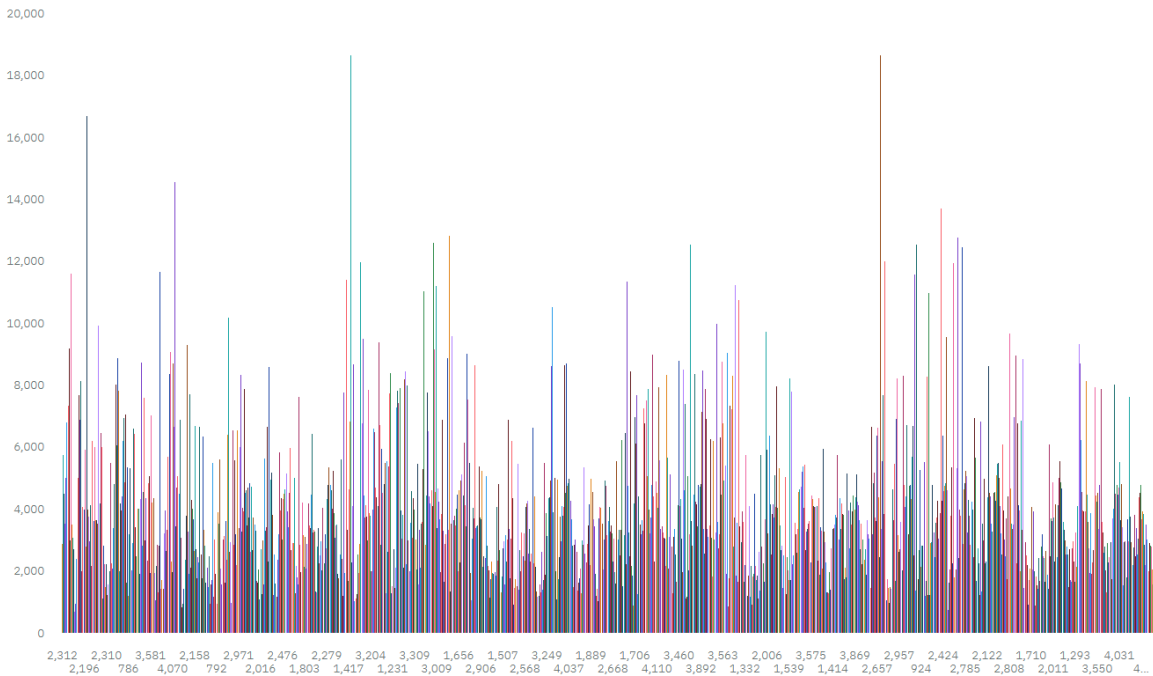
First.Time.Visits by Page.Loads colored by Unique.Visits

Unique.Visits
● 667 ● 724 ● 825 ● 836 ● 876 ● 888 ● 891 ● 892 ● 895 ● 901 ● 903 ● 908 ● 923 ● 925 ● 930 ● 934 ● 936 ● 941 ● 947
● 948 ● 951 ● 955 ● 958 ● 960 ● 1,005 ● 1,011 ● 1,015 ● 1,027 ● 1,035 ● 1,039 ● 1,045 ● 1,054 ● 1,071 ● 1,074 ● 1,076 ● 1,080 ● 1,090 ● 1,096
● 1,099 ● 1,104 ● 1,105 ● 1,108 ● 1,112 ● 1,118 ● 1,120 ● 1,121 ● 1,122 ● 1,142 ● 1,145 ● 1,147 ● 1,155 ● 1,159 ● 1,168 ● 1,170 ● 1,172 ● 1,177 ● 1,178
● 1,180 ● 1,187 ● 1,192 ● 1,193 ● 1,197 ● 1,199 ● 1,208 ● 1,211 ● 1,214 ● 1,219 ● 1,222 ● 1,223 ● 1,227 ● 1,229 ● 1,237 ● 1,240 ● 1,241 ● 1,244 ● 1,249
● 1,251 ● 1,264 ● 1,265 ● 1,266 ● 1,271 ● 1,276 ● 1,277 ● 1,281 ● 1,284 ● 1,287 ● 1,288 ● 1,289 ● 1,291 ● 1,299 ● 1,304 ● 1,305 ● 1,307 ● 1,308 ● 1,310
● 1,312 ● 1,316 ● 1,317 ● 1,319 ○ ...

First.Time.Visits for Page.Loads

Column values
● Increase ● Decrease ● Total

Page.Loads sized by First.Time.Visits

First.Time.Visits (S...
522   8,634
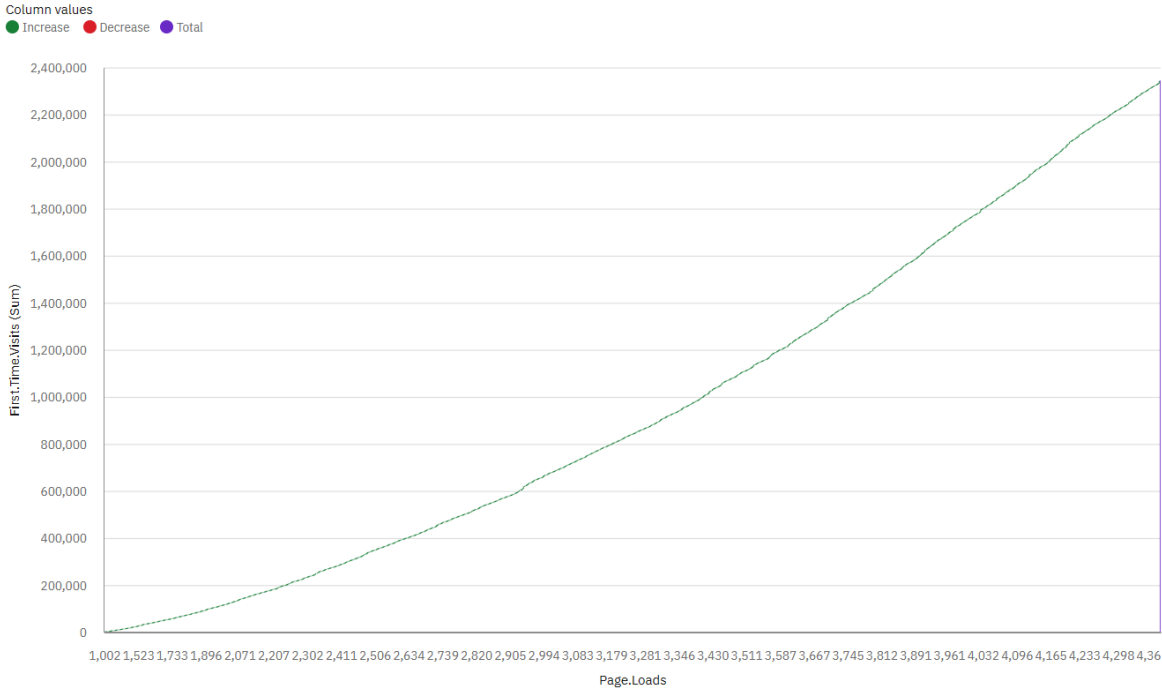
CONCLUSION

In conclusion, leveraging IBM Cognos Analytics for website traffic analysis involves meticulous data preprocessing and insightful visualization techniques. By ensuring data accuracy and employing compelling visualizations, businesses can extract meaningful insights, enabling informed decision-making and optimizing online performance.